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invention which are, for brevity, described in the context of a single embodiment, may also be provided separately or in any suitable sub-combination.

Unless otherwise defined, all technical and scientific terms used herein have the same meanings as are commonly understood by one of ordinary skill in the art to which this invention belongs. Although methods similar or equivalent to those described herein can be used in the practice or testing of the present invention, suitable methods are described herein.

All publications, patent applications, patents, and other 10 references mentioned herein are incorporated by reference in their entirety. In case of conflict, the patent specification, including definitions, will prevail. In addition, the materials, methods, and examples are illustrative only and not intended to be limiting.

It will be appreciated by persons skilled in the art that the present invention is not limited to what has been particularly shown and described hereinabove. Rather the scope of the present invention is defined by the appended claims and includes both combinations and sub-combinations of the 20 various features described hereinabove as well as variations and modifications thereof, which would occur to persons skilled in the art upon reading the foregoing description.

What is claimed is:

- 1. A single-loop implant comprising:
- (a) a base; and
- (b) a sequence of at least two segments including a first end segment and a second end segment, adjacent segments of said sequence being interconnected at a hinge which defines a hinge axis about which said adjacent segments pivot,
- wherein said first end segment is interconnected with said base at a fixed hinge, said fixed hinge defining a hinge axis about which said first end segment pivots relative to said base, and wherein said second end segment is interconnected with said base at a sliding interconnection,
- such that said base and said sequence of at least two segments assume an insertion state in which said sequence of segments is adjacent to said base, and a deployed state in which a part of said sequence of segments is deflected 40 away from said base, wherein said base and said sequence of segments in said deployed state define an outer perimeter of the single-loop implant,

wherein all of said hinge axes are parallel,

- and wherein, in said insertion state, said sliding interconnection is at a first position along said base, and wherein, in said deployed state, said sliding interconnection is displaced over a flat surface of said base from said first position towards said fixed hinge.
- 2. The implant of claim 1, wherein, in said deployed state, 50 said base and said sequence of segments form a loop at least partially defining an enclosed volume.
- 3. The implant of claim 1, wherein said sliding interconnection additionally allows pivotal movement of said second segment relative to said base.
- 4. The implant of claim 1, wherein said fixed hinge is located at one end of said base.
- 5. The implant of claim 4, wherein said fixed hinge is located at a distal end of said base.

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- **6**. The implant of claim **1**, wherein said sliding interconnection includes an element slidingly engaged within a slot.
  - 7. A method comprising the steps of:
  - (a) providing the implant of claim 1;
  - (b) introducing said implant in said insertion state into an intervertebral space;
  - (c) deploying said implant to said deployed state; and
  - (d) filling a space between said sequence of segments and said base with filler material to promote intervertebral fusion
  - 8. An implant comprising:
  - (a) a base; and
  - (b) a sequence of at least two segments including a first end segment and a second end segment, adjacent segments of said sequence being interconnected at a hinge which defines a hinge axis about which said adjacent segments pivot,
  - wherein said first end segment is interconnected with said base at a fixed hinge, said fixed hinge defining a hinge axis about which said first end segment pivots relative to said base, and wherein said second end segment is interconnected with said base at a sliding interconnection,
  - such that said base and said sequence of at least two segments assume an insertion state in which said sequence of segments is adjacent to said base, and a deployed state in which a part of said sequence of segments is deflected away from said base,
  - wherein deployment of said sequence of at least two segments from said insertion state to said deployed state corresponds to expansion of the implant asymmetrically to one side of said base,
  - wherein all of said hinge axes are parallel, and wherein, in said insertion state, said sliding interconnection is at a first position along said base, and wherein, in said deployed state, said sliding interconnection is displaced over a flat surface of said base from said first position towards said fixed hinge.
- 9. The implant of claim 8, wherein, in said deployed state, said base and said sequence of segments form a loop at least partially defining an enclosed volume.
- 10. The implant of claim 8. wherein said sliding interconnection additional allows pivotal movement of said second end segment relative to said base.
- 11. The implant of claim 8, wherein said fixed hinge is located at one end of said base.
- 12. The implant of claim 11, wherein said fixed hinge is located at a distal end of said base.
- 13. The implant of claim 8. wherein said sliding interconnection includes an element slidingly engaged within a slot.
  - 14. A method comprising the steps of:
  - (a) providing the implant of claim 8;
  - (b) introducing said implant in said insertion state into an intervertebral space;
  - (c) deploying said implant to said deployed state; and
  - (d) filling a space between said sequence of segments and said base with filler material to promote intervertebral fusion.

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